



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/579,982

05/19/2006

Michael Larsson

07-2123

3593

20306

7590

02/10/2009

MCDONNELL BOEHNEN HULBERT & BERGHOFF LLP
300 S. WACKER DRIVE
32ND FLOOR
CHICAGO, IL 60606

EXAMINER

TREYGER, ILYA Y

ART UNIT

PAPER NUMBER

3761

MAIL DATE

DELIVERY MODE

02/10/2009

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/579,982	Applicant(s) LARSSON, MICHAEL	
	Examiner ILYA Y. TREYGER	Art Unit 3761	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 19 May 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-16 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-16 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on _____ is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>05/19/2006</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. Claims 1-16 of the US Patent Application No. 10/579982 filed 05/19/2006 are presented for examination.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1, 3, 5, 6, 9-11, and 14-16 are rejected under 35 U.S.C. 102(b) as being anticipated by Johnson (US 4,536,180).

4. In Re claim 1, Johnson discloses a surgical suction instrument comprising:

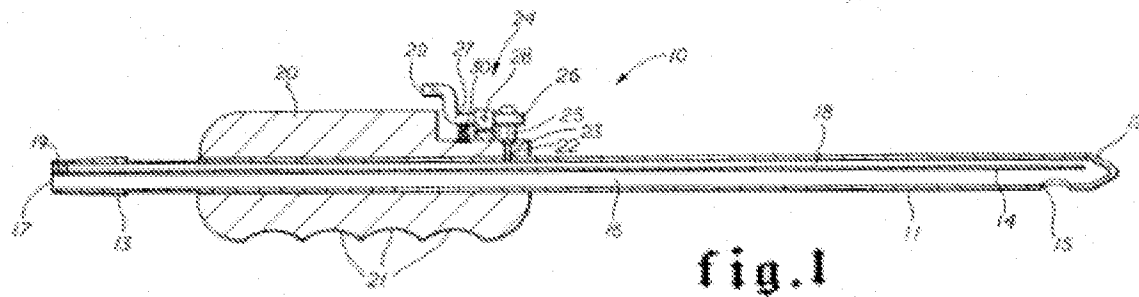
a catheter (Fig. 1) having a suction passage 16 (Fig. 1), which is a drainage lumen (Col. 4, line 4) having a proximal end 12 (Fig. 1) in fluid communication with a venting passage 18 (Fig. 1), which is an auxiliary lumen (Col. 4, line 6);

the surgical instrument is disclosed for use of body material suction (Abstract, line 1) that reads on the collection container is present;

a source of suction (Col. 4, lines 29-31);

a valve apparatus 24 (Fig. 1) for opening the auxiliary lumen (Col. 4, lines 13, 14); and

since the source of vacuum is disclosed as being controllable (Col. 4, lines 30, 31), the controller for controlling pressure difference between a pressure in the drainage lumen and a pressure in the atmosphere is provided, wherein the controller is fully capable of increasing the pressure continuously or/and abruptly (claims 9 and 10).



5. In Re claim 3, Since the invention of Johnson is disclosed as connected to a source of vacuum in the controllable manner (Col. 4, lines 29-31), the pressure sensor being in communication with the controller is disclosed because this is the only way of controlling the vacuum conditions.

6. In Re claim 5, Johnson discloses the surgical instrument (catheter) fully capable of increasing the negative pressure to achieve any pressure level allowed by the vacuum source (Col. 4, lines 29-31).

7. In Re claim 6, Johnson discloses the apparatus, wherein the measuring the pressure is carried out in the drainage lumen (Col. 4, lines 29-31).

8. In Re claims 11 and 15, since the apparatus of Johnson is disclosed for use of suction body material, Johnson discloses the method for operating an apparatus comprising:

a catheter (Fig. 1) having a suction passage 16 (Fig. 1), which is a drainage lumen (Col. 4, line 4) having a proximal end 12 (Fig. 1) in fluid communication with a venting passage 18 (Fig. 1), which is an auxiliary lumen (Col. 4, line 6);

the surgical instrument is disclosed for use of body material suction (Abstract, line 1) that reads on the collection container is present;

a source of suction (Col. 4, lines 29-31);

Art Unit: 3761

a valve apparatus 24 (Fig. 1) for opening the auxiliary lumen (Col. 4, lines 13, 14); and
since the source of vacuum is disclosed as being controllable (Col. 4, lines 30, 31), the
controller for controlling pressure difference between a pressure in the drainage lumen and a
pressure in the atmosphere is provided;

the method comprising the steps of
opening the auxiliary lumen; and
increasing the pressure difference between a pressure in the drainage lumen and a
pressure in the atmosphere, wherein the measuring the pressure is carried out in the drainage
lumen (claim 15) (Col. 4, lines 29-31).

9. In Re claim 14, Johnson discloses the method, wherein the auxiliary lumen is opened by
opening a first valve (Col. 4, lines 15-28).

10. In Re claim 16, Johnson discloses the method for removing body material from a
body cavity comprising the steps of:

providing a catheter comprising: a catheter (Fig. 1) having a suction passage 16 (Fig.
1), which is a drainage lumen (Col. 4, line 4) having a proximal end 12 (Fig. 1) in fluid
communication with a venting passage 18 (Fig. 1), which is an auxiliary lumen (Col. 4, line 6);

the surgical instrument is disclosed for use of body material suction (Abstract, line 1) that
reads on the collection container is present;

a source of suction (Col. 4, lines 29-31);
a valve apparatus 24 (Fig. 1) for opening the auxiliary lumen (Col. 4, lines 13, 14); and
since the source of vacuum is disclosed as being controllable (Col. 4, lines 30, 31), the
controller for controlling pressure difference between a pressure in the drainage lumen and a

Art Unit: 3761

pressure in the atmosphere is provided, wherein the controller is fully capable of increasing the pressure continuously or/and abruptly (claims 9 and 10);

the method further comprising the steps of opening the auxiliary lumen; and
increasing the pressure difference between a pressure in the drainage lumen and a pressure in the atmosphere, wherein the measuring the pressure is carried out in the drainage lumen (claim 15) (Col. 4, lines 29-31).

Claim Rejections - 35 USC § 103

11. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

12. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

13. Claims 2, 4, 7, 8, 12, and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Johnson (US 4,536,180).

14. In Re claim 2, Johnson discloses the invention discussed above, but does not expressly disclose the apparatus, wherein the suction source is a suction pump.

Art Unit: 3761

It would have been obvious to one having ordinary skill in the art at the time the invention was made to use the suction pump as a suction source, since in the accordance with definition the suction (vacuum) pump is a pump used to evacuate an enclosure (See *The American Heritage® Dictionary of the English Language, Fourth Edition*).

15. In Re claim 4, Johnson discloses the invention discussed above, but does not expressly disclose the vent valve being operated automatically via controller.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to make the vent valve operable automatically via the controller, since it has been held that broadly providing a mechanical or automatic means to replace manual activity which has accomplished the same result involves only routine skill in the art.

16. In Re claims 7 and 8, Johnson discloses the invention discussed above, but does not expressly disclose the apparatus comprising the second pressure sensor.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to supply the apparatus with the second pressure sensor in order to diversify the pressure control over different elements of the apparatus, since it has been held that mere duplication of the essential working parts of a device involves only routine skill in the art.

17. In Re claim 12, Johnson discloses the invention discussed above, but does not expressly disclose the method, wherein the pressure difference is increased by increasing the power of the suction source.

Art Unit: 3761

It would have been obvious to one having ordinary skill in the art at the time the invention was made to increase the pressure difference by increasing the suction source power in order to provide control over the vacuum level, since it was known in the art that the vacuum level of the suction source is the straight function of the vacuum device power.

18. In Re claim 13, Johnson discloses the invention discussed above, but does not expressly disclose the method, wherein the pressure difference is increased only when the pressure in the auxiliary lumen corresponds to atmospheric pressure.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to increase the pressure difference only when the pressure in the auxiliary lumen corresponds to atmospheric pressure since it was known in the art that the presence of the pressure corresponding to atmospheric pressure causes absence of the suction process the apparatus is intended to be used for.

Conclusion

19. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. US 4,342,315 disclose the SUCTION CATHETERS WITH IMPROVED SUCTION CONTROL VALVE. US 5,112,302 disclose the METHOD AND APPARATUS FOR PERFORMING LIPOSUCTION.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to ILYA Y. TREYGER whose telephone number is (571)270-3217. The examiner can normally be reached on 7:30-5:00.

Art Unit: 3761

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tatyana Zalukaeva can be reached on 571-272-1115. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Ilya Y Treyger/
Examiner, Art Unit 3761

/Michele Kidwell/
Primary Examiner, Art Unit 3761